

u/045/017

BARRICK MERCUR GOLD MINE

DOGM
MINERALS PROGRAM
FILE COPY

July 31, 1989

RECEIVED
AUG 02 1989

DIVISION OF
OIL, GAS & MINING

Mr. Donald A. Ostler, P.E.
Director
Bureau of Water Pollution Control
Utah Department of Health
P.O. Box 16690
Salt Lake City, Utah 84116-0690

Dear Mr. Ostler:

Subject: Dump Leach Area 2

Barrick is in receipt of your letter dated June 20, 1989 pertaining to Dump Leach Area 2. The delivery date to the Mercur Mine was June 28, 1989.

Barrick continues to share the Bureau's goal that waters of the State of Utah are not contaminated as a result of our activities, and we are addressing this issue in a prudent manner. We believe that the potential impact of the operation of Dump Leach Area 2 on the underlying groundwater is negligible.

We also believe that the Bureau's June 20, 1989 letter presents unfounded concerns with respect to seepage through the earthen liner. Specifically, the Bureau's comments on page 2 of "known seepage from the clay liner" and Attachment, page 3 "operation of the dump at high pregnant liquor levels can only increase the velocity and amounts of cyanide contaminants that pass through the clay liner and into the groundwater environment" are inappropriate. The integrity of the earthen liner and potential contaminant movement to the groundwater are critical issues yet to be resolved. Therefore, we would ask that such language be corrected as a matter of public record in that the statements are misleading and potentially damaging.

Plan to Control Leachate Head

Operating practices designed to minimize the solution pool depth have been implemented since early 1989. Data reported indicates an overall decrease in leakage collection average flow rate from 18.6 gpm (1988) to 13.5 gpm (January-June 1989). Specifically, the following items are submitted for

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your review and constitute our continued plan to control solution depth within Dump Leach Area 2.

- In mid-July 1989 the pregnant solution pump was reset to the lowest point in the cistern. This will result in an additional decrease in solution depth under normal operating conditions. The arrangement of the cistern and all relationships are shown in Exhibit 1.
- The air pressure (bubbler) system has been reset in the cistern to provide maximum depth readings of solution above the pump. Direct readings are obtainable in feet on the gauge located at the cistern surface opening. Multiple readings will continue to be taken daily.
- Automatic high-low probes have been reset in the cistern to provide for constant pool depth management. Under this configuration, the maximum pool depth above the top of the synthetic liner configuration will be approximately 26.5 feet. Barrick feels that Dump Leach Area 2 can be operated satisfactorily under these parameters, barring unusual or unforeseen system upset.
- The leakage collection system continues to operate as per approved and permitted design. In addition to data currently reported to the Bureau for leakage collection (gpm, CN, Au, pH, conductivity), pool elevation readings will be obtained, averaged, and reported for that date. The reports will continue to be submitted on a calendar month basis.
- All above-noted items are functional as of this date and will continue throughout the life of Dump Leach Area 2.

Mercur Mine management recognizes that seepage calculations for the earthen liner include some assumptions which cannot be proven without actual observation. Barrick is therefore requesting a meeting with the Bureau to discuss the earthen liner seepage issue and the Bureau's rationale and intent for a groundwater monitoring plan. It is hoped that as a result of this meeting a more meaningful understanding of our respective positions and a definitive course of action will be forthcoming.

In addition to the items noted above, Barrick has retained Dames and Moore of Salt Lake City to complete an evaluation of

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the Dump Leach Area 2 design, construction, monitoring, and operating scenario. A report detailing their findings will be prepared for our mutual consideration by late August 1989.

We again wish to emphasize our commitment to resolving these issues in a timely and mutually agreeable fashion. Your continued cooperation is also most appreciated. Please contact our Mr. Glenn M. Eurick at 268-4447 to arrange the proposed meeting.

Respectfully,



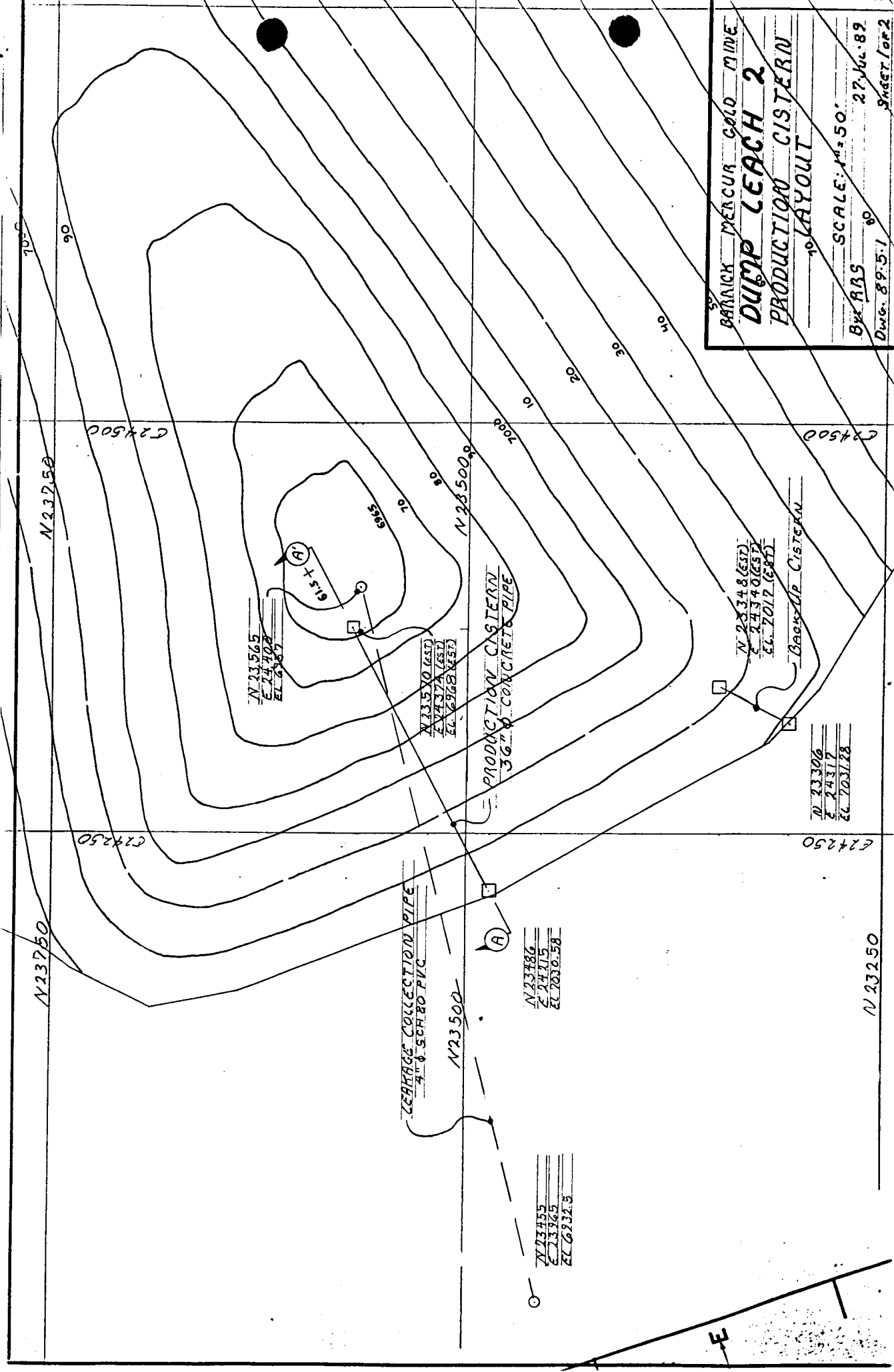
Frank D. Wicks
Vice President and General Manager

FDW/cg

Attachments

cc: C. L. Landa
G. M. Eurick
R. R. Sacrison
E. E. Maurer
M. P. Richardson
S. Matheson (Parsons, Behle & Latimer)
D. Bird (Parsons, Behle & Latimer)
F. Nelson (Assistant Attorney General's Office)
M. Trujillo (Tooele County)
W. Hedberg (DOGM)

BARNICK MERCUR GOLD MINE
DUMP LEACH 2
 PRODUCTION CISTERN
 LAYOUT
 SCALE: 1" = 50'
 BY ARS
 Dwg. 89-5-1
 27 JUL 89
 SHEET 1 OF 2



N 23750

N 23750

C 24500

C 24250

LEACHAGE COLLECTION PIPE
4" SCH 80 PVC

PRODUCTION CISTERN
36" CONCRETE PIPE

Back-Up Cistern

N 23565
E 24408
EL 2687

N 23570 (EST)
E 24374 (EST)
EL 2688 (EST)

N 23348 (EST)
E 24340 (EST)
EL 2017 (EST)

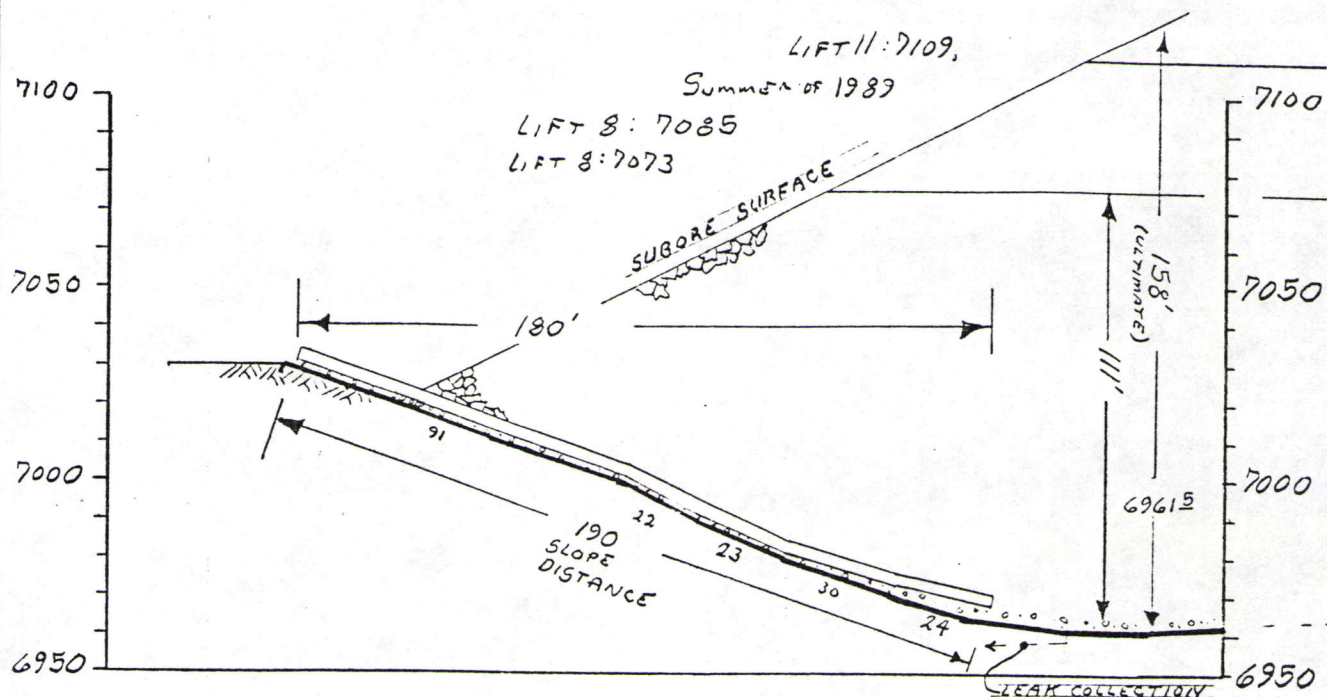
N 23306
E 24317
EL 203128

N 23486
E 24315
EL 203058

N 23455
E 23425
EL 20325

N 23250

E



N 23486
E 24215
EL 7030.6

N 23570 (EST)
E 24374 (EST)
EL 6968 (EST)

PRODUCTION CISTERN ELEVATION CROSS-SECTION A-A'

TOP-OF-LINER (T.O.L.) ELEVATION	: 6961.5'
ORIGINAL PUMP SUCTION ELEVATION	: 6969.5'
ORIGINAL BUBBLER ELEVATION	: 6971.5'
RE-SET PUMP SUCTION ELEVATION	: 6968.0'
RE-SET BUBBLER ELEVATION	: 6969.0'
RE-SET PUMP (AUTO-OFF) LOW LEVEL	: 6973.0'
RE-SET PUMP (AUTO-ON) HIGH LEVEL	: 6988.0'
OPERATING PUMP RANGE - FEET VERTICAL FROM T.O.L.	: 11.5'-26.5'